



PSYCHOLOGY 261
Physiological Psychology
Winter 2009

Instructor:
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Office hours & Email:
1:30 - 2:30 Tues & Thurs
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Teaching Assistants:
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2:00 - 3:00 Wednesday
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3:30 - 4:30 Monday
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***Lectures* - Monday, Wednesday, and Friday at 9:30-10:20 in RCH101**

This is an introductory course to physiological psychology in which we will cover a number of topics concerning brain-behaviour relations. Because of the breadth of the field, there will not be enough time to cover all the major areas, but we will cover the basic principles of brain organisation and neural transmission, and explore topics such as psychopharmacology, vision, audition, language, memory, and neurological disorders. The course goals include the following:

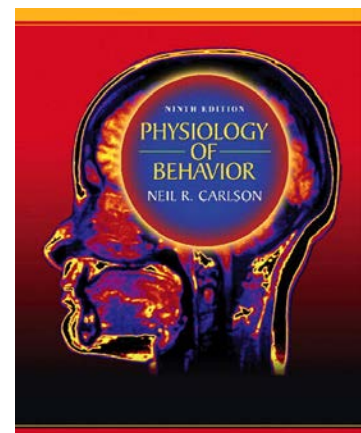
- By the end of this course, you should be able to *identify* various brain areas from a variety of brain images (diagrams, pictures, etc...)
- By the end of this course, you should be able to *describe the functions and processes* of various brain areas and brain systems.
- By the end of this course, you should be able to *apply* your knowledge about the brain to various situations.
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Because of the large number of students in the class, I will spend most of class time lecturing. However, I do encourage discussion and questions to clarify material. I think the class will be much better if you participate by asking, and answering, questions! It is also extremely important that you read the assigned text material as well as attend lectures! Though there will be overlap between text and lectures, there will be material in the text that will not be covered in lectures and likewise, there will be some material in the lectures that is not in the text. Regular attendance is strongly encouraged.

Required Text

Carlson, N.R. (2007). *Physiology of Behaviour 9th Edition*.
Toronto: Allyn and Bacon.

(The CD-ROM packaged with the textbook contains lots of animations that are useful for studying).



Optional Text

Carlson, M., & Carlson, N. R. (2007). *Study Guide for 'Carlson: Physiology of Behavior' (9th Edition)*. Toronto: Allyn and Bacon.

UW ACE:

Information regarding the course, including announcements, the course syllabus, course readings, and course lecture notes, will be available on **UW ACE**. **All course email will be sent to your UW email account using UW ACE.** This is to ensure that all students receive the email. Be sure to check your UW email frequently. In addition, please ensure that all email to the course instructors and the TA is sent through **UW ACE**.

Course Requirements and Evaluations:

Lectures: Lectures will often cover material that is not included in the text, and material from the text will not necessarily be covered in the lectures. **For examination purposes, you are responsible for ALL material covered in the lectures (including videos or other material presented) as well as the assigned text chapters and supplemental readings.** The PowerPoint slides for each lecture will be available on UW ACE.

Exams: There will be four in-class tests (25%; non-cumulative). Please make sure to note the dates of the tests and exam (see dates below). They be 50 minutes in length (during class time) will consist of multiple choice, diagram, and short answer/fill in the blank questions. The purpose of these tests are to guide your studying and assess your knowledge of the material.

Research Participation:

Participation in research is an integral part of this course, and provides undergraduate Psychology students with opportunities to learn first hand about psychology research and related concepts. Many students report that participation in research is both an educational and interesting experience.

Research Experiences Group (REG)

4% easy bonus marks for study participation!!

Psych 261 students can participate in Psychology studies to experience first-hand some of the concepts being taught in this course and in doing so earn a “bonus” of 4% on top of your final grade (i.e., maximum final grade of 104%). If you'd rather not participate in studies your T.A. will provide alternate assignments that you can do instead.

Educational focus of participation in research

To maximize the educational benefits of participating in research, students will receive feedback information following their participation in each study detailing the following elements:

- Purpose or objectives of the study
- Dependent and independent variables
- Expected results
- References for at least two related research articles
- Provisions to ensure confidentiality of data

- Contact information of the researcher should the student have further questions about the study
- Contact information for the Director of the Office of Research Ethics should the student wish to learn more about the general ethical issues surrounding research with human participants, or specific questions or concerns about the study in which sh/he participated.

How does REG work?

UW Psych professors and students conduct research in areas related to Physiological Psychology which you will be learning about in this class. REG coordinates researchers and participants in these studies. In-lab studies take place in research labs in the PAS building. On-line studies can be done from any computer with internet access. Study durations are 30 or 60 minutes, conducted in 1 or 2 sessions. Bonus grades are calculated as “Study Credits”, one-half credit per 30 minute participation. One credit equals a 1% grade increase. Some of your other Psych classes may also be in REG. All of our studies have received ethics approval from the UW Office of Research Ethics (ORE).

How do I sign up?

Once you are registered in the course, you will get an account on SONA (our web-based Study Sign-Up system) at <http://uwaterloo.sona-systems.com> and you will receive an email with your UserID and Password. IF YOU DO NOT RECEIVE this email, please report this to regadmin@uwaterloo.ca immediately. Note, if you had a Sona participants account last term it is still active.

- 1) Logon: User ID is your Quest ID (eg. j2smith), Password is your Student ID (eg 2001234) *or whatever password you used last term
- 2) Read/Acknowledge the ORE “Human Subjects/Privacy Policy”
- 3) Complete the “Prescreen Questionnaire” (demographic info). There is no credit for this and you may decline if you wish however *completing it will increase your eligibility for studies*.
- 4) Go to ““Studies” or “Study Sign-Up” page to view the list of available studies
- 5) Click on the title for study details
- 6) Click on the option to “View Timeslots” and/or “Participate”
- 7) You’ll receive a confirmation email and a reminder the day before the study.
- 8) Upon completion of the study you are granted your Study Credit and given feedback about the study hypothesis, design and predictions.

When should I sign up?

Right away, the sooner the better!!! The On-line study “Mass Testing Survey W09” (one full credit) will only be offered for one month and you *should do this survey as soon as possible*. Researchers often select participants based on their responses and doing this survey increases your eligibility for other studies. Note that you can only do this survey if you have completed the Prescreen questionnaire. Doing both Prescreen Questionnaire and Mass Testing Survey helps you (by providing more qualifying studies and it helps researchers (by identifying more qualified participants) so we would greatly appreciate it if you would do both.

Are there any restrictions to the studies I can sign up for?

Yes ...

- i) the study must be eligible for a credit in Psych 261 (as noted in the study description)

- ii) only **2 of your 4** credits can be for **On-line** studies and
- iii) you should try to spread your participation out over the term (**1-2 credits per month** is recommended).

If you wait until March to earn most/all of your credits there will not be enough studies available. The last day to participate for credit is **April 3** but you can participate for pay until April 24.

Where can I get more information, instructions, help with login problems etc?

REG website: <http://www.arts.uwaterloo.ca/~regadmin/regparticipant>
 REG Coordinator: regadmin@watarts.uwaterloo.ca

Alternative to participating in research

Students are not required to participate in research, and not all students wish to do so. As an alternative to participation in research, students may submit short reviews (1½ to 2 pages) of journal articles relevant to the course material. Each review article counts as one percentage point. You should contact your TA to get approval before writing the review. To receive credit, you must follow specific guidelines. The review must:

- **Be submitted before April 3. Late submissions will NOT be accepted under ANY circumstances.**
- Be typed
- Fully identify the title, author(s), source and date of the article. A copy of the article must be attached.
- Identify the psychological concepts in the article and indicate the pages in the textbook that are applicable. Critically evaluate the application or treatment of those concepts in the article. If inappropriate or incorrect, identify the error and its implications for the validity of the article. You may find, for example, misleading headings, faulty research procedures, alternative explanations that are ignored, failures to distinguish factual findings from opinions, faulty statements of cause-effect relations, errors in reasoning, etc. Provide examples whenever possible.
- Clearly evaluate the application or treatment of those concepts in the article.
- Keep a copy of your review in the unlikely event we misplace the original.

Students may complete any combination of a) participation in research or b) article review up to a total of 4% points.

Overview of Evaluation

Mid-term #1	Mon. Jan. 26 th	25%
Mid-term #2	Mon. Feb. 23 rd	25%
Mid-term #3	Mon. March 16 th	25%
Mid-term #4	Fri. April 3 rd	25%

BONUS: Research Participation 4 X 1% = 4%

Each test:

- is **non-cumulative**
- is **50 minutes** (full class) in length
- will be based on the material presented **in the text and in lectures**
- will be composed mostly of multiple choice, with some diagrams and/or short answer
- will be written in the regular classroom (**RCH 101**) during class time

If you miss a test:

It is the student's responsibility to provide, **within 1 week of the missed test, acceptable documentation** to support a medical, compassionate, or religious claim for missing a test. Otherwise a grade of zero may be assigned for the missed test.

If you feel that you have a medical or personal problem that is interfering with your work, you should contact your Instructor and the *Academic Counseling Office* as soon as possible. Problems may then be documented and possible arrangements to assist you can be discussed at the time of occurrence rather than on a retroactive basis. In general, retroactive requests for grade revisions on medical or compassionate grounds will not be considered. For example, in the case of illness, the student must provide an official illness certificate on appropriate letterhead from their physician, which states that, due to medical reasons, it was impossible for the student to write the exam at the scheduled time. A note on a prescription pad is not an acceptable medical certificate.

Once I have received appropriate documentation for missing a test, a make-up test, covering that material, will be scheduled for a time that is mutually convenient for myself or the TAs, and you.

NOTE REGARDING ACADEMIC OFFENSES:

This is an excerpt from the undergraduate calendar:

Student offences punishable by disciplinary action are described in Policy 71*. Refer to the section (***) at the end of Policy 33 for a list of on-campus individuals, services/facilities available to advise students of their rights under this Policy and to advise on the procedures to be followed.

Academic offences shall include, but shall not be limited to, the following:

- Infringing unreasonably on the work of other members of the University community (e.g. disrupting classes or examinations; harassing, intimidating or threatening others).
- Violation of safety regulations in a laboratory or other academic setting.
- Cheating on examinations, assignments, work term reports, or any other work used to judge student performance.
- Impersonating another student or entering into an arrangement with another person to be impersonated for purposes of taking examinations or tests, or carrying out assignments.
- Plagiarism, which is the act of presenting the ideas, words or other intellectual property of another as one's own.
- Obtaining by improper means examination papers, tests, or similar materials, or using or distributing such materials to others.

- Falsifying academic records, including tests and examinations, or submitting false credentials.
- Oral or written misrepresentations (e.g., fraudulent health claims) which may have an effect on academic evaluations.
- Submitting an essay, report, or assignment when a major portion has been previously submitted or is being submitted for another course without the express permission of all instructors involved.

Disciplinary Penalties. One or more of the following disciplinary penalties may be imposed:

- A **reprimand** or warning to the student that her/his behaviour has been unacceptable.
- **Submission of a failing grade** in an examination, test, assignment, or course, or in a term.
- **Disciplinary probation** for the balance of the period of registration at the University in the degree program in which the student was registered at the time of the offence.
- **Restraining orders** in the case of threats to individuals or restitution for property or other damages.
- **Expunging** grades or **revoking** degrees.
- **Suspension** of a student from the University, which shall not exceed three years.
- **Expulsion**, which shall be permanent.

* *The full text of Policy 71 is available on the web.*

(<http://www.adm.uwaterloo.ca/infosec/Policies/policy71.pdf>). Copies can also be obtained from the Secretariat (Needles Hall, Room 3060); the Co-ordinator, Ethical Behaviour and Human Rights (Mathematics and Computer Building, Room 4049); and the Ombudsperson (Student Life Centre, Room 2128).

An additional note from the Associate Dean of Arts for Undergraduate Affairs:

“Note on avoidance of academic offences: **All students registered in the courses of the Faculty of Arts are expected to know what constitutes an academic offences, to avoid committing academic offences, and to take responsibility for their academic actions.** When the commission of an offences is established, disciplinary penalties will be imposed in accord with Policy #71 (Student Academic Discipline). For information on categories of offenses and types of penalties, students are directed to consult the summary of policy #71 (Student Academic Discipline) which is supplied in the undergraduate calendar. If you need help in learning how to avoid offenses such as plagiarism, cheating, and double submission, or if you need clarification of aspects of the discipline policy, ask your course instructor for guidance. Other resources regarding the discipline policy are your academic advisor and the Undergraduate Associate Dean.”

The Official Version of the Course Outline

If there is a discrepancy between the hard copy outline and the outline posted on UW-ACE, the outline on UW-ACE will be deemed the official version. Outlines on UW-ACE may change as instructors develop a course, but they become final as of the first class meeting for the term.

Students with Disabilities

The Office for Persons with Disabilities (OPD), located in Needles Hall, Room 1132, collaborates with all academic departments to arrange appropriate accommodations for

students with disabilities without compromising the academic integrity of the curriculum. If you require academic accommodations to lessen the impact of your disability, please register with the OPD at the beginning of each academic term.

Concerns About the Course or Instructor (Informal Stage)

We in the Psychology Department take great pride in the high quality of our program and our instructors. Though infrequent, we know that students occasionally find themselves in situations of conflict with their instructors over course policies or grade assessments. If such a conflict arises, the Associate Chair for Undergraduate Affairs (Dr. Colin Ellard) is available for consultation and to mediate a resolution between the student and instructor. Dr. Ellard's contact information is as follows:

Email: cellard@uwaterloo.ca

Ph 519-888- 4567 ext 36852

A student who believes that a decision affecting some aspect of his/her university life has been unfair or unreasonable may have grounds for initiating a grievance. See Policy 70 and 71 below for further details.

Academic Integrity, Academic Offenses, Grievance, and Appeals

To protect course integrity, as well as to provide appropriate guidance to students, course outlines in the Faculty of Arts incorporate the following note on avoidance of academic offenses:

Academic Integrity: in order to maintain a culture of academic integrity, members of the University of Waterloo community are expected to promote honesty, trust, fairness, respect and responsibility.

Grievance: A student who believes that a decision affecting some aspect of his/her university life has been unfair or unreasonable may have grounds for initiating a grievance. Read Policy 70 - Student Petitions and Grievances, Section 4, <http://www.adm.uwaterloo.ca/infosec/Policies/policy70.htm>

Discipline: A student is expected to know what constitutes academic integrity, to avoid committing academic offenses, and to take responsibility for his/her actions. A student who is unsure whether an action constitutes an offense, or who needs help in learning how to avoid offenses (e.g., plagiarism, cheating) or about 'rules' for group work/collaboration should seek guidance from the course professor, academic advisor, or the Undergraduate Associate Dean. When misconduct has been found to have occurred, disciplinary penalties will be imposed under Policy 71 - Student Discipline. For information on categories of offenses and types of penalties, students should refer to Policy 71 - Student Discipline, <http://www.adm.uwaterloo.ca/infosec/Policies/policy71.htm>

Appeals: A student may appeal the finding and/or penalty in a decision made under Policy 70 - Student Petitions and Grievances (other than regarding a petition) or Policy 71 - Student Discipline if a ground for an appeal can be established. Read Policy 72 - Student Appeals, <http://www.adm.uwaterloo.ca/infosec/Policies/policy72.htm>

Tentative* Lecture Schedule:

<u>Class</u>	<u>Topic</u>	<u>Text Reading</u>
Week 1 (Jan 5,7,9)	Introduction/ History	Chpt. 1
Week 2 (Jan 12,14,16)	Neurons	Chpt. 2
Week 3 (Jan 19,21,23)	Neuroanatomy	Chpt. 3
January 26	Test 1	
Week4 (Jan 28,30)	Methods in Research	Chpt. 5
Week 5 (Feb 2,4,6)	Psychopharmacology/ Drugs	Chpts. 4 &18
Week 6 (Feb 9,11,13)	Sleep	Chpts. 9
Week 7 (Feb 16,18,20)	READING WEEK	Read! ☺
February 23	Test 2	
Week 8 (Feb 25,27)	Vision	Chpt. 6
Week 9 (March 2,4,6)	Other Senses	Chpt. 7
Week 10 (March 9,11,13)	Emotion/Learning & Memory	Chpts. 11 & 13
March 16	Test 3	
Week 11 (March 18,20,22)	Human Communication	Chpt. 14
Week 12 (March 23,25,27)	Disorders	Chpts. 15 & 16
Week 11 (March 30 & April 1)	Anxiety & Stress	Chpt. 17
April 3	Test 4	

***Note that this is a tentative lecture schedule and is subject to change. The amount of class time that is spent on each of the topics listed above depends in part on class interest. If students are interested in a particular topic then it may be expanded at the expense of other topics. Therefore, I reserve the right to make changes as necessary. However, I will point out all changes in class and, in particular, what information you will be expected to know for exams.**